

kindly enter the AF

/Amar Daglawi/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Skarby et al.

Atty. Ref.: 2380-1174; Confirmation No. 8758

Appl. No. 10/598,678

TC/A.U. 2618

Filed: September 7, 2006

Examiner: Daglawi, Amar A

For: REDUCING THE NUMBER OF FEEDERS IN AN ANTENNA DIVERSITY SYSTEM

* * * * *

June 23, 2009

Box AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REQUEST FOR RECONSIDERATION AFTER FINAL

Responsive to the final Official Action dated May 12, 2009, Applicants respectfully request reconsideration.

All claims 17-32 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by newly-applied USP 6,047,199 to DeMarco. This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). DeMarco fails to satisfy this rigorous standard.

DeMarco describes a system and method for transmitting cellular signals has linear power amplifiers mounted on a cellular tower within a tower circuit. The linear power amplifiers provide the primary amplification of the signals which are transmitted by the antennas on the tower. By moving the amplifiers from a base station to the tower circuit, the system and method can employ less-expensive and more-reliable amplifiers and need not employ high-cost low-loss feeder lines. See Abstract.

Claim 17 recites a method for reducing the number of feeders. The office action does not provide any citation to text in DeMarco that teaches this feature. DeMarco does not disclose reducing the number of feeders, but rather only permitting less expensive feeders to be used instead of more expensive low loss feeders. The number of feeders stays the same in DeMarco.

Another claim feature from claim 17 missing from DeMarco is the claimed “receiver diversity antenna arrangement.” DeMarco does not describe “diversity processing two or more of the forwarded diversity signals to obtain a single enhanced received signal corresponding to the transmitted signal,” as recited in claim 17. The diversity is not even used in Marcos. Although the office action refers to Figs. 1, 2, and 3A, none of these figures show diversity processing two or more received signals. Simply having two antennas does not mean that there is diversity processing. Columns 3, 5, and 6 are also referred to, but they describe transmitting functions. The combiners simply combine different signals from different radios 18 for transmission as a composite signal. In the claimed diversity reception, “each antenna [is] adapted for reception of a radio frequency (RF) signal transmitted from the same transmitter, where each RF signal received at each of the spaced apart antennas is at the same frequency and carries the same information,” and after diversity processing result in “a single enhanced

received signal corresponding to the transmitted signal.” The office action does not explain where or how this is disclosed in DeMarco.

DeMarco’s focus is transmission and not reception. In the summary of the invention in DeMarco, every “object of the present invention” is “a system and method for transmitting mobile radio signals.” See col. 3, line 55-col. 4, line 14. Moreover, the text in columns 3, 5, and 6 relied on by the Examiner describes downlink transmission from the base station rather than uplink reception to the base station.

Nor is it understood how DeMarco discloses the claimed “converting one or more received antenna signals into a corresponding number of different frequency signals by mixing with a first set of a corresponding number of reference signals.” What is the first set of corresponding reference signals in DeMarco? Where in DeMarco are signals received at one or both of the antennas 16 frequency-converted with a corresponding reference signal and then forwarded with all of the received antenna signals to the base station 32 via a single feeder?

With DeMarco lacking multiple features from claim 17, the anticipation rejection based on DeMarco is improper and should be withdrawn for this claim and its dependent claims. Similar claim features are also missing from the independent apparatus claim 24, and thus, the anticipation rejection based on DeMarco should be withdrawn for this claim and its dependent claims.

Regarding claims 18 and 25, how specifically does DeMarco describe converting all received antenna signals except one?

Regarding claims 21 and 28, how specifically does DeMarco describe converting the received antenna signal on the second antenna into an intermediate (IF) signal, and forwarding the IF signal together with the non-converted received antenna signal on the first antenna to the

Skarby et al.
Appl. No. 10/598,678
June 23, 2009


radio base station on a single feeder, thus providing 2-way receiver diversity with a single feeder? The same question must be asked for claims 22, 23, 29, and 30.

Regarding claims 33 and 34, the word "polarization" is not present in the text of DeMarco.

The application is in condition for allowance. An early notice to that effect is requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
John R. Lastova
Reg. No. 33,149

JRL:maa
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100